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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,956	03/19/2004	Kazushige Kawasaki	403012	7169
23548 7	7590 05/03/2006		EXAMINER	
LEYDIG VOIT & MAYER, LTD 700 THIRTEENTH ST. NW SUITE 300			REAMES, MATTHEW L	
			ART UNIT	PAPER NUMBER
	N, DC 20005-3960		2891	
			DATE MAILED: 05/03/2000	6

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/803,956	KAWASAKI ET AL.			
		Examiner	Art Unit			
		Matthew L. Reames	2891			
	The MAILING DATE of this communication app	ears on the cover sheet w	ith the correspondence address			
	Period for Reply					
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNI: 16(a). In no event, however, may a control of the community and will expire SIX (6) MON cause the application to become Al	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status			•			
1)⊠	Responsive to communication(s) filed on 24 Ma	arch 2006.				
2a)	This action is FINAL . 2b)⊠ This action is non-final.					
3)						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
4)⊠	Claim(s) 3-6 is/are pending in the application.		·			
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
•	Claim(s) <u>3-6</u> is/are rejected.					
,	Claim(s) is/are objected to.	- cleation requirement				
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>19 March 2004</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
	Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (under 35 U.S.C. § 119	•				
12) ★ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
			•			
Attachment(s)						
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	Summary (PTO-413) (s)/Mail Date			
3) 🔯 Info	rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date <u>3/19/2004</u> .		Informal Patent Application (PTO-152)			

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DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 1. Claim 3 rejected under 35 U.S.C. 102(b) as being anticipated by Ooi (20020072142).
 - a. As to claim 3, Ooi teaches a semiconductor optical device (see paragraph 6) comprising an epitaxial structure of a III-V group semiconductor material (see abstract), containing at least an active layer which can emit light, wherein composition of the epitaxial structure continuously changes near an interface (see fig. 1b).
 - b. As to claim 4, Ooi teaches wherein a photoluminescence wavelength of the optical device is blue-shifted, as compared to a semiconductor optical device which has an active layer with the same composition as said active layer and an epitaxial structure with a composition that changes stepwise near the interface (see abstract) this inherent to to the process of quantum well intermixing (QWI).
 - c. As to claim 5, Ooi teaches wherein the photoluminescence wavelength is blue-shifted by at least 20 meV (see paragraph 32).
 - d. As to claim 6, Ooi teaches wherein distortion of the epitaxial structure is reduced compared to a semiconductor optical device which has an active layer with the same composition as said active layer and an epitaxial structure with a composition changing stepwise near the interface (see eg. fig 10e item 1123).

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By applicant own admission this window is known to help reduce distortion (see page 2 of applicant specification).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew L. Reames whose telephone number is (571)272-2408. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on (571)272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MLR